UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/687,987	10/17/2003	Christopher J. Cormack	42P17666	1395

45209 7590 04/11/2012

MISSION/BSTZ
BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP
1279 OAKMEAD PARKWAY
SUNNYVALE, CA 94085-4040

EXAMINER	
THOMAS, JASON M	
ART UNIT	PAPER NUMBER
2423	

MAIL DATE	DELIVERY MODE
04/11/2012	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/687,987	CORMACK ET AL.	
	Examiner	Art Unit	
	Jason Thomas	2423	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *28 December 2011*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

4)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

5)☒ Claim(s) *1-3,5-11,13-17,19-22,24-28 and 30* is/are pending in the application.

5a) Of the above claim(s) _____ is/are withdrawn from consideration.

6)☐ Claim(s) _____ is/are allowed.

7)☒ Claim(s) *1-3,5-11,13-17,19-22,24-28 and 30* is/are rejected.

8)☐ Claim(s) _____ is/are objected to.

9)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

10)☐ The specification is objected to by the Examiner.

11)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

12)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed December 28, 2011, have been fully considered but they are not persuasive.

Applicants argue that, "There is no motivation to combine." (see pg. 9) More specifically, Applicants asserts that while "The Examiner states that it would be obvious to display CC text using alpha blending techniques in order to minimize the obstructions to the video and make the dialog easier to follow... these are advantage cited by Molaro, not necessarily advantages provided by the claimed invention. The claimed invention does not necessarily move the translated text to minimize obstruction and to identify the speaker." (Ibid.) Applicants also argue that, "Molaro does not solve the problems addressed by the claimed invention." (Ibid.) More specifically, Applicants state that, "Molaro does not allow for extra languages and characters not supported by CC text to be shown on a television without a CC text decoder. Molaro does not suggest any change to the text at all except to change its position." (Ibid.) The examiner disagrees.

In response to applicant's argument that there is no teaching, suggestion, or motivation to combine the references, the examiner recognizes that obviousness may be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one

of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988), *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992), and *KSR International Co. v. Teleflex, Inc.*, 550 U.S. 398, 82 USPQ2d 1385 (2007). In this case, while the advantages of using the visual technique of superimposing to simultaneously display text and video may be different than that of the instant application (i.e. the motivation to combine is based on the advantages as provided by Molaro), a rational different from Applicant's is permissible.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 20-24 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 20-24 recite a "tangible machine-readable medium", however based on the broadest reasonable interpretation of a " tangible machine-readable medium " such a medium is not restricted to a physical medium and as such can be interpreted to read on a "carrier wave" or other non-tangible matter (see

Specification [0052]) and therefore does not fall into any of the statutory categories presented under 35 U.S.C. 101. The examiner would suggest language such as "a computer readable storage device", "a computer readable non-transitory storage medium" or "where the medium is not a signal".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3, 5-11, 13-17, 19-22, 24-28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chang, (U.S. Patent No. 5,543,851), in view of Agnihotri et al., (WO 03/030018 A1) and Molaro et al., (U.S. Pub. No. 2006/0262219 A1).

Regarding claims 1, 5, 7, 14 and 20: Chang discloses an apparatus and a method of using an apparatus executing software code using a processing unit (see [col. 3, ll. 42-53]) comprising: a video receiver for receiving a video signal with encoded text data, the encoded text being encoded into the video signal as text (see [abstract], [fig. 1], [figs. 1, 2], [fig. 9], [col. 1, ll. 32-35], [col. 1, ll. 49-53], [col. 2, ll. 32-53] for receiving a video signal with embedded caption data which is extracted from the received signal); a decoder for decoding the encoded text data from within the video signal (see [abstract], [fig. 1 item 20], [fig. 2 and 8 item 32], [col. 1, ll. 11-16],

[col. 1, ll. 49-53] for decoding the extracted caption data); a text translator for processing the decoded text data to generate character images representing the decoded text data (see [abstract], [fig. 5b], [col. 1, ll. 58-67], [col. 3, ll. 23-35], [col. 3, ll. 42-53], [col. 4, ll. 9-16], [col. 4, ll. 44-47], [col. 5, ll. 43-46] for processing the text to obtain a translation and generating character images to be displayed on the screen to represent the caption data); and a video processor to generate character images of the closed caption data with a video portion of the video signal for display (see [abstract], [fig. 4 item 410], [figs. 5a & 5b], [fig. 9], [col. 2, ll. 65-66], [col. 4, ll. 20-26], [col. 4, ll. 40-50] for a processor which combines the text with the video for display which inherently requires video processing to accomplish) however, Chang is silent on superimposing the translated text data in the form of character images over images of a video portion of the video signal for display to include the translated text as part of the video images.

Agnihotri teaches an apparatus which can be operated by executing a set of programmable instructions where said apparatus among other things is capable of translating text data, filtered from an audio/video signal, into a target language and displaying the translated text data while simultaneously playing the audio/video component of the synchronized signal (see [abstract], [pg. 3, ll. 19-29], [pg. 6, ll. 27-30], [pg. 8, ll. 4-9]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use an executable code to instruct an apparatus which displays translated text, synchronized to be displayed together on the same display, with video, as taught in Agnihotri, when creating a system capable

of translating text as instructed by a processing unit, as taught in Chang, because superimposing the translated text on the active video which is being played and watched by a viewer allows him or her to watch the video and read the translation simultaneously without having to alternate their attention between the two (see [pg. 2, ll. 10-17]).

Agnihotri however is silent with regards to including the translated text as part of the video images.

In an analogous field of endeavor, Molaro teaches modifying the conventional means of displaying closed captioning (i.e. where captioning is directly overlayed on the video) by superimposing the closed captioning onto the video images, using alpha blending techniques such that the closed captioning is part of the video images (see e.g. [abstract], [0021], [0027], [0029], [claim 28]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify method of displaying the closed captioning, by using alpha blending techniques to superimpose the closed captioning to be included as part of the video images, as taught by Molaro, in order to minimize the obstructions to the video and enhance the viewer experience by making the dialog easier to follow.

Regarding claim 25: The combined teachings of the aforementioned prior art discloses a wireless video receiver (see Chang e.g. [col. 2, ll. 42-48], [col. 7, ll. 6-11] for a wireless video receiver) comprising: a video receiver to receive a video signal with encoded text data, the encoded text data being encoded into the video signal as text (see Chang e.g. [abstract], [fig. 1], [fig. 2], [fig. 9], [col. 1, ll. 32-35], [col. 1, ll. 49-

53], [col. 2, ll. 32-53]); a decoder to decode the encoded text data from within the video signal (see Chang e.g. [abstract], [fig. 1 item 20], [fig. 2 and 8 item 32], [col. 1, ll. 11-16], [col. 1, ll. 49-53]); a text processor to process the decoded text data (see Chang e.g. [abstract], [fig. 5b], [col. 1, ll. 58-67], [col. 3, ll. 42-53], [col. 4, ll. 9-16], [col. 4, ll. 44-47], [col. 5, ll. 43-46] for processing the text to obtain a translation); and a video processor to combine the translated text data with a video portion of the video signal for display to include the translated text as part of the video images (see Chang e.g. [abstract], [fig. 4 item 410], [figs. 5a & 5b], [fig. 9], [col. 2, ll. 65-66], [col. 4, ll. 20-21], [col. 4, ll. 40-50] for a processor to combine the text with the video for display; see Agnihotri e.g. [abstract], [pg. 3, ll. 19-29], [pg. 6, ll. 27-30], [pg. 8, ll. 4-9] for translating text data, filtered from an audio/video signal, into a target language and displaying the translated text data while simultaneously playing the audio/video component of the synchronized signal; see also Molaro e.g. [abstract], [0021], [0027], [0029], [claim 28] for superimposing the closed captioning onto the video images, using alpha blending techniques such that the closed captioning is part of the video images; see also the rejections of claims 1, 5, 7, 14 and 20).

Regarding claim 2: The combined teachings of the aforementioned prior art discloses wherein the encoded text data comprises closed caption data (see Chang e.g. [abstract], [fig. 2 and 8 item 32], [col. 1, ll. 31-38], [col. 2, ll. 34-38]).

Regarding claim 21: Change in view of Agnihotri, discloses wherein decoding the text data comprises extracting a text data packet from a video transport

stream of the video signal (see Agnihotri e.g. [pg. 3, ll. 19-27], [pg. 4, ll. 25-30] for extracting text data from a video stream).

Regarding claims 3, 10, 11 and 28: The combined teachings of the aforementioned prior art discloses wherein the text translator further comprises a dictionary and a processor to apply the decoded text data to the dictionary to correct and translate the text data and to obtain the processed text data (see Chang e.g. [abstract], [fig. 5b], [col. 1, ll. 58-67], [col. 4, ll. 9-13], [col. 5, ll. 43-46], [col. 5, ll. 55-57] for a dictionary or a memory storage of definitions used for correcting and translating the text data thus able to obtain the processed data).

Regarding claims 13, 19, 24 and 30: The combined teachings of the aforementioned prior art discloses wherein the video processor encodes the translated text into text data and substitutes the encoded translated text data for the encoded text data of the received video signal (see Chang e.g. [abstract], [fig. 4 item 410], [figs. 5a & 5b], [fig. 9], [col. 2, ll. 65-66], [col. 4, ll. 20-21], [col. 4, ll. 40-50] where the microprocessor displays a video image using a display signal which can be displayed with or without the processed caption text which inherently requires inserting the processed text data into the display signal thus combining the character images over the video image signal; see also Agnihotri e.g. [abstract], [pg. 6, ll. 27-30] for said text data being translated text data).

Regarding claims 8, 15 and 26: The combined teachings of the aforementioned prior art discloses wherein the decoder reads data from a vertical

blanking interval of the video signal (see Chang: [col. 3, ll. 5-12] where the data is read by the decoder from the conventional VBI).

Regarding claims 9, 16 and 27: The combined teachings of the aforementioned prior art discloses wherein the decoder comprises a digital video transport stream decoder (see Chang e.g. [fig. 1 item 16], [col. 2, ll. 48-58], [col. 3, ll. 13-16], [col. 7, ll. 20-22] for a tuner capable of decoding a video transport stream).

Regarding claims 6, 17 and 22: Chang teaches the use of a dictionary (see [fig. 5a, 528]) but does not explicitly teach the use of a phrase dictionary.

Agnihotri, however explicitly teaches wherein translating text data comprises applying phrases in the decoded text data to a phrase dictionary (see [abstract] for language databases which include a metaphor interpreter; see also [col. 2, ll. 26-29], [col. 3, ll. 30-32], [col. 5, ll. 27-31]).

At the time the invention was made, it would have been obvious to one of ordinary skill in the art to interpret phrases, as taught in Agnihotri, to assist in the interpretation closed caption data, as taught in Chang, because by interpreting a phrase rather than a literal translation the information conveyed will be less likely to be out of context (see [pg. 2, ll. 10-14]).

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Thomas whose telephone number is (571)270-5080. The examiner can normally be reached on Mon. - Thurs., 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

J. Thomas

/VIVEK SRIVASTAVA/
Supervisory Patent Examiner, Art Unit 2423